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EXAMINER

HUYNH, NAM TRUNG

ART UNIT

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2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/526,761 | <b>Applicant(s)</b><br>TOLLI ET AL. |  |
|                              | <b>Examiner</b><br>NAM HUYNH         | <b>Art Unit</b><br>2617             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17,35-38,46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17,35-38,46 and 47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 18-21, 39-45, and 48-57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/22/2008. Claims 1-17, 35-38, 46, and 47 are now pending in the present application.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-17, 36-38, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramos et al. (US 6,944,143) (hereinafter Ramos) in view of Palenius et al. (US 2002/0019231).

Regarding claim 1, Ramos teaches a method comprising: providing information associated with a plurality of radio access means (base stations) in a communications system to a network element of the communications system (radio resource controller/RNC) (page 5, paragraph 93), said information based on a plurality of parameters associated with each of the plurality of radio access means for serving a mobile station (pages 3-4, paragraphs 44-71), wherein a radio access means radio access means of the plurality of radio access means includes a plurality of cells (page 2, paragraph 27, each base station is associated with a cell and the coverage area of one cell overlaps with several micro and/or pico cells), and further wherein the plurality of radio access means use different communication methods (page 3, paragraph 41);

ordering the radio access means based on said information (page 3, paragraph 41);

selecting a target radio access means of the plurality of radio access means based on the ordering (page 4, paragraph 78); and

However, Ramos does not explicitly teach sending a request to the mobile station sending a request to the mobile station to perform compressed mode measurements at the mobile station based on the selected target radio access means, said measurements for selecting a cell associated with the selected target radio access means. Palenius et al. discloses a method and device for improved handover procedures in mobile communications systems (title). In the scope of the invention, an access network comprises several base stations (plurality of radio access means) and a control node (RNC or network element) (page 5, paragraph 45). In a first step of the

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method in a handover process, the access network commands the terminal to perform measurements for a selected measurement set of cells (page 6, paragraphs 50, 55), which may include parameter settings for a compressed mode (performing compressed mode measurements at the mobile station) (page 6, paragraph 51). In response to this command, the terminal determines a measurement set that includes a defined number of cells (page 6, paragraph 53) and performs measurement of cell quality, which may include a plurality of measurement results (page 6, paragraph 56) for the cells included in the measurement set and transmits the results to the access network for further evaluation in a handover procedure (page 6, paragraph 55). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ramos to include performing compressed mode measurements, as taught by Palenius, on the handover candidate cells that were prioritized, in order to suspend data transmissions of the mobile station when the mobile is to make measurements on cells of different frequency bands or systems (page 1, paragraph 7).

Regarding claim 2, Ramos teaches the selection is for handover of the mobile station from a first radio access means to a second radio access means (page 4, paragraph 78).

Regarding claim 3, Ramos teaches the first radio access means operates at a first frequency of a radio access technology and the second radio access means operates at a second frequency of said radio access technology (page 1, paragraph 4 and page 3, paragraph 41, the invention of Ramos pertains to handover between cells

of different communications systems and it is well known in the art that different communications systems operate on different frequencies).

Regarding claims 4 and 7, Palenius teaches the radio access technology is code division multiple access (page 1, paragraph 5).

Regarding claims 5 and 8, Ramos teaches the radio access technology is wideband code division multiple access (page 2, paragraph 27).

Regarding claim 6, Ramos teaches the first radio access means operates in accordance with a first radio access technology, and the second radio access means operates in accordance with a second, different, radio access technology (page 3, paragraph 41).

Regarding claim 9, Ramos teaches the second radio access means comprises a second plurality of cells (page 2, paragraph 27), and Palenius teaches the compressed mode measurements comprise signal strength measurements of at least one of said second plurality of cells (pages 5-6, paragraph 50).

Regarding claim 10, Ramos teaches the second radio access means comprises a second plurality of cells (page 2, paragraph 27), and the compressed mode measurements comprise signal strength measurements of at least one of said second plurality of cells (page 4, paragraph 68), and Palenius teaches the compressed mode measurements comprise decoding a parameter associated with at least one of the second plurality of cells (page 7, paragraph 62).

Regarding claim 11, Palenius teaches the parameter is the base station identification code associated with one of the plurality of cells (page 7, paragraph 62).

Regarding claim 12, Ramos teaches the plurality of parameters further comprises at least one of the following: a real time load, a non real time load, or a signal to interference ratio (page 3, paragraphs 46, 57).

Regarding claim 13, Ramos teaches the information comprises a weighting value (page 4, paragraph 72).

Regarding claim 14, Ramos teaches the plurality of parameters comprise the service priority weight is associated with a suitability of the radio access means in providing a service requested by the mobile station (page 4, paragraphs 74-78).

Regarding claim 15, Ramos teaches the network element is a radio network controller (page 5, paragraph 83).

Regarding claim 16, Ramos teaches the information is provided by a common resource radio management (page 5, paragraph 85).

Regarding claim 17, Ramos teaches the common resource radio management is a common radio management server (page 5, paragraph 85).

Regarding claim 36, Ramos teaches selected target radio access means comprises a second plurality of cells, and the compressed mode measurements comprise signal strength measurements of at least one cell of the second plurality of cells (page 4, paragraph 68), the method further comprising selecting a handover cell of the second plurality of cells based on a highest signal strength measurement (page 4, paragraphs 74-78).

Regarding claim 37, Ramos teaches ordering the radio access means is further based on a type of service requested by the mobile station (page 4, paragraphs 70, 71).

Regarding claim 38, Ramos teaches the plurality of parameters comprise a service priority weight that is associated with each of the radio access means and that comprises a suitability of a selected radio access means in providing a service requested by the mobile station (page 4, paragraph 72).

Regarding claim 46, Palenius teaches triggering a handover of the mobile station to the cell selected based on the compressed mode measurements at the mobile station (page 7, paragraph 62).

5. Claims 35 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramos et al. (US 6,944,143) (hereinafter Ramos) in view of Palenius et al. (US 2002/0019231) (hereinafter Palenius) as applied to claim 1 above, and further in view of Lemson (US 5,655,217).

Regarding claim 35, The combination of Ramos and Palenius teaches the limitations set forth in claim 1, and teaches performing measurements on a plurality of radio access means based on an ordering (Palenius page 7, paragraph 59) but does not explicitly teach:

determining if performing the compressed mode measurements at the mobile station is successful;

if performing the compressed mode measurements is unsuccessful, selecting a second target radio access means of the plurality of radio access means based on the ordering; and



performing second compressed mode measurements at the mobile station based on the second selected target radio access means, said second measurements for selecting a second cell associated with the selected second target radio access means.

Lemson teaches handover procedure comprising determining if measurement data comprises an excessively high signal level and/or noise bursts. In this condition, the measurements are repeated (figure 5 and column 17, lines 29-59). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Ramos and Palenius to include verification of measurements, as taught by Lemson, in order to reduce the potential for spurious responses and increase measurement accuracy.

Regarding claim 47, it is further obvious that when the mobile station detects a spurious measurement, as taught by Lemson, it can notify the RNC or CRRM of Ramos to choose another cell to measure.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims Claims 1-17, 35-38, 46, and 47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

NTH  
3/28/08